Message

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Sent: 9/21/2017 2:33:23 PM
To: bnelson@airalliancehouston.org; oldham_melanie@yahoo.com
CC: Bridget.C.Bohac@tceq.texas.gov; Blanco, Arturo [Blanco.Arturo@epa.gov]; Vaughn, Gloria [Vaughn.Gloria@epa.gov]; R6HarveyEJ [R6HarveyEJ@epa.gov]
Subject: Follow-up: EJ Network Harvey Call - Information requested (Air Monitoring)

Everyone,

As follow-up to the EJ Network Harvey call this week, please see information received from Bridget C. Bohac, TCEQ regarding mobile monitoring and mobile monitoring units in the Houston, Corpus Christi and Beaumont Port Arthur area.

The information below is provided in response to questions raised regarding the location of mobile monitoring units and mobile monitoring in the Houston and Beaumont-Port Arthur area during the EPA, Region 6 conference call on September 19, 2017, regarding EJ Network Hurricane Harvey Response. Between the TCEQ and EPA, the following air monitoring assets have been used in the above areas:

EPA Airborne Spectral Photometric Environmental Collection Technology (ASPECT) flights
EPA Trace Atmospheric Gas Analyzer (TAGA) mobile monitoring bus
TCEQ hand-held air monitoring instruments
TCEQ contractor, Leak Surveys Inc., helicopter flyovers using optical gas imaging camera (OGIC)
TCEQ continuous air monitoring network.

Both TCEQ and EPA investigators have spent numerous hours, both day and night, monitoring neighborhoods and industrial fence lines with hand-held instruments, such as optical gas imaging cameras, toxic vapor analyzers, and portable multi-gas monitors. The use of these tools allows for the most effective source identification for drifting volatile organic compound (VOC) plumes so that swift action can be taken to address the cause of these emissions. TCEQ investigators in the Houston, Corpus Christi and Beaumont regional offices routinely conduct reconnaissance monitoring near industrial fence lines and adjacent communities. Reconnaissance monitoring has been conducted in these areas with increased frequency to identify potential emission sources. In furthering efforts to monitor storm impacted areas and address emission sources, the TCEQ is also conducting aerial surveys in the Houston and Beaumont areas using a helicopter equipped with an OGIC that can image VOCs and other hydrocarbons invisible to the eye. Once the TCEQ receives the results from these flyovers, regional investigators in Houston and Beaumont will follow up with facilities to address identified issues.

The EPA, in coordination with the TCEQ, has conducted extensive true mobile monitoring in industrial areas using the EPA's Trace Atmospheric Gas Analyzer (TAGA) bus and Airborne Spectral Photometric Environmental Collection Technology (ASPECT) flights that provide real-time sampling of potential emission targets. Additionally, TCEQ conducted aerial surveys described above.

Two of EPA's TAGA mobile air pollution detection vehicles have been deployed for over 50 hours through neighborhoods that border industrial facilities to detect pollution that may result from industries starting up after the storm. At a rate of 210 pollution measurements per minute, over 630,000 measurements have been taken by the TAGAs as of September 15, 2017. Additionally, nine TCEQ environmental investigators and four EPA investigators conducted air monitoring in the Manchester area with hand-held instruments. The results from ASPECT, TAGA, hand-held instruments, and continuous air monitors have shown no levels of immediate health concern.

As data from these, or any other air monitoring efforts, are appropriately quality assured they have been and will continue to be made available publicly. Near real-time continuous air monitoring data from the TCEQ's stationary monitoring network can be found at http://www17.tceq.texas.gov/tamis/index.cfm?fuseaction=home.welcome or

https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=ab6f85198bda483a997a6956a8486539. Daily air quality reports can be found on the TCEQ's Hurricane Harvey response web page at https://www.tceq.texas.gov/response/hurricanes.

Some of your questions regarding mobile monitoring in the Houston area may have resulted from the TCEQ's monitoring vans referenced in media reports. These vans do not possess the capability to monitor while in transit. In fact, under variable weather conditions, these units may not result in finding the plume of air emissions. Also, unlike true mobile air sampling devices, these units take several hours to calibrate and once in the field, have additional set-up time of up to one hour. If the plume of emissions moves, the unit must go through a post-sampling quality control process before it can change locations. To the contrary, actual mobile devices can continue to monitor in transit while moving with the plume of emissions. In responding to the impacts of Hurricane Harvey, the TCEQ has used every available and appropriate resource to support its mission to measure air quality.

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